

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (canceled)


Claim 4 (new): An echo canceller that eliminates echoes produced in an echo path formed between a loudspeaker that converts receiving signals into voice output and a microphone that converts voice input into sending signals, the echo canceller comprising:

an adaptive digital filter, designed to imitate transmission characteristics of the echo path, that generates pseudo echo signals responsive to a part of the receiving signals; and

a subtracter that subtracts the pseudo echo signals from the sending signals containing echo noise that is input to the microphone from the echo path, to provide an echo canceled sending signal,

wherein tap coefficients of said adaptive digital filter are modified responsive to the part of the receiving signals and a part of the echo canceled sending signal.

Claim 5 (new): The echo canceller of claim 4, further comprising an attenuator that attenuates the sending signals containing echo noise so that an amplitude level of the echo noise matches an amplitude level of the pseudo echo signals, and that provides the attenuated sending signals to said subtracter as the sending signals for subtraction.

 Claim 6 (new): The echo canceller of claim 5, wherein said attenuator is a variable attenuator.

Claim 7 (new): The echo canceller of claim 5, wherein said attenuator is a fixed attenuator.

Claim 8 (new): The echo canceller of claim 4, further comprising an amplifier that amplifies the pseudo echo signals so that an amplitude level of the pseudo echo signals matches an amplitude level of the echo noise, and that provides the amplified pseudo echo signals to said subtractor as the pseudo echo signals for subtraction.

Claim 9 (new): The echo canceller of claim 8, wherein said amplifier is a variable

amplifier.

Claim 10 (new): The echo canceller of claim 8, wherein said amplifier is a fixed amplifier.

Claim 11 (new): The echo canceller of claim 4, further comprising an amplifier that amplifies the part of the receiving signals so that an amplitude level of the pseudo echo signals matches an amplitude level of the echo noise, and that provides the amplified part of the receiving signals to said adaptive digital filter as the part of the receiving signals.

Claim 12 (new): The echo canceller of claim 11, wherein said amplifier is a variable amplifier.

Claim 13 (new): The echo canceller of claim 11, wherein said amplifier is a fixed amplifier.

Claim 14 (new): The echo canceller of claim 11, wherein the loudspeaker converts the receiving signals that are not amplified by said amplifier.